



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Apollo Fire Detectors Ltd
Address	36 Brookside Road, Havant, PO9 1JR, United Kingdom
Type	Fire Detection and Alarm System
Description	Multi Sensor (thermally enhanced optical) Detector
Trade Name	ORBIS Range
Application	Marine, offshore and industrial use in Environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register Test Specification No. 1: 2020
Specified Standard	EN54-7:2018 CEA4021: 2003
Additional Tests	Hazardous Areas Components(ATEX): EEX II 1G Ex ia IIC T4(- 40° C ≤ Ta ≤ + 60° C) / T5(- 40° C ≤ Ta ≤ + 40° C
Other Conditions	<ol style="list-style-type: none">1. Type Approval of products according to Test Specification No. 1 is essentially for hardware. Examination of software aspects is restricted to functional operation as demonstrated in the Performance Test.2. The requirements of the Lloyd's Register (LR)Rules apply when the equipment is installed on LR Classed vessels and offshore installations.3. Maximum operating voltage is 28V in accordance with specification.4. Screened cable is to be used for all installations.

Matt Higgins

Electrical & Control - Senior Specialist to
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A member of the Lloyd's Register group

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Type Approval Certificate

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 04/00089(E5), LR2332246TA

The Design Appraisal Document LR2332246TA-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.



LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UKITSO SOUTHAMPTON

Issued to: APOLLO FIRE DETECTORS LTD.

For: MULTI SENSOR (THERMALLY ENHANCED OPTICAL) DETECTOR

Types: ORBIS IS (INTRINSICALLY SAFE) RANGE

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

ISO 9001: 2015 Certificate. No: 010, issue 19 6 Jul 2021
Schedule of Accreditation BRE Global Ltd Iss 128 17 Feb 2022

DATASHEETS

38531-902 – Revision 8 – Orbis Optical Chamber 28 Sept 2015

TEST REPORTS

P105642/1.2 Test Schedule for EMC Update of Various Products (Phase Two) 18 Jul 2018
TE-P105642-1001 Iss1 BRE Test Report Variety of Detectors and Bases 21 Mar 2019
Lloyd's Register Inspection and Surveillance of Production Facilities SOU 1400418 25 Apr 2014
BRE Covering Letter for Test Report TE101167-1001 14 Aug 2015
BRE Test Report TE101167-1001, issue 1 14 Aug 2015

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Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.



Page 2 of 2
Certificate No: LR2332246TA-01
Issue Date: 13-July-2023
Expiry Date: 25-Jan-2028
Reference: UKITSO/TA/ETS/MJH/WP50997357

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2332246TA-01

Appendix

TYPE

ORBIS Range comprising of:

- ORB-MB-00001-MAR: Orbis TimeSaver base
- ORB-RB-40004-MAR: Orbis TimeSaver relay base
- ORB-OH-43001-MAR: with SensAlert, FasTest and DirtAlert
- ORB-OH-43003-MAR: with SensAlert, FasTest and DirtAlert and Flashing LED

ORBIS IS (Intrinsically Safe) Range comprising of:

- ORB-OH-53027-APO: with SensAlert, FasTest and DirtAlert
- ORB-OH-53028-APO: with SensAlert, FasTest, DirtAlert and Flashing LED
- ORB-MB-50018-APO: Orbis IS TimeSaver Base
- ORB-BA-50008-APO: Orbis IS Base Adaptor (in conjunction with 45681- 207 base)